U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No.	05000286/2010010
Docket No.	05000286
License No.	DPR-64
Licensee:	Entergy Nuclear Operations Inc.
Facility:	Holtec Manufacturing Division
Location:	Turtle Creek, PA
Inspection Dates:	November 29 – December 2, 2010, February 7 – 10, 17, 2011
Inspector:	John Nicholson Health Physicist Decommissioning Branch Division of Nuclear Materials Safety Rob Temps Senior Safety Inspector Rules, Inspections, & Operations Branch Division of Spent Fuel Storage and Transportation
Approved By:	Judith A. Joustra, Chief Decommissioning Branch Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

IR 05000286/2010010; 11/29/2010 – 12/2/2010, 02/07 – 10, and 17, 2011; Indian Point Energy Center (IPEC); Oversight of factory testing and inspection of IPEC Unit 3 shielded transfer cask (STC) at the Holtec Manufacturing Division (HMD) facility in Turtle Creek, Pennsylvania.

This report covers an announced on-site inspection conducted by an NRC Region I inspector and an inspector from the NRC Nuclear Materials Safety and Safeguards Division, Spent Fuel Storage and Transportation Branch, of IPEC's oversight of the factory testing of the Unit 3 STC at HMD. A license amendment request (ML091940177) for the STC under 10 CFR Part 50 was submitted by Entergy Nuclear Operatons, Inc. (the licensee) to the NRC on July 8, 2009. At the time of this inspection, the NRC was in the process of drafting a second request for additional information (RAI) to the licensee regarding the amendment request for the STC. The review of that request is ongoing. This STC will be used for the wet transfer of spent fuel assemblies from the IPEC Unit 3 spent fuel pool (SFP) to the IPEC Unit 2 SFP.

The inspector reviewed equipment performance, program controls, and documentation. Specific inspection areas included the testing of STC components, observing STC component inspection on the floor of the manufacturing facility, a review of the non-conformance reports to date, a review of the licensee's quality assurance program, and interviews with both the licensee and Holtec personnel performing the testing and inspection of the components.

Within the scope of this inspection, no violations of NRC requirements were identified.

REPORT DETAILS

1.0 Review of Fabrication Documentation

a. Inspection Scope (IP60852)

The inspection included a limited review of the licensee's oversight of the HMD fabrication of the IPEC STC since the previous inspection at HMD conducted in April 2010. The inspector performed an onsite review of the HMD's Technical Specification requirements for implementing procedures controlling fabrication to assure that HMD's Technical Specification requirements were incorporated.

b. Observations and Findings

IPEC has a written contract with URS Washington Division (URS), an engineering and technical services provider company, to provide oversight of onsite quality assurance for the fabrication of the STC at HMD. The URS contractor is required to witness hold points during the fabrication process. The inspector reviewed several hold points and noted that URS staff signed off on the component documentation to confirm that hold points had been inspected as required. Weekly verbal communication occurs between URS and the IPEC Project Manager. The inspector reviewed the purchase agreement specifications developed by the licensee and provided to HMD. The purchase agreement states that all drawings for fabrication must be approved by the licensee prior to the start of fabrication. It also states that non-conformance reports (NCRs) considered as design changes require the licensee's approval, although the contractor may proceed at its own risk prior to IPEC's acceptance. The contractor must request and obtain written approval of the licensee prior to shipment of the component.

While reviewing NCRs associated with the STC, the inspector noticed that NCR 09121-1, Rev. 3, involved a design change to the STC shell thickness from 7/8" to 3/4". This design change was dispositioned without the licensee's approval or review of the analysis performed by Holtec. Licensee personnel stated that they were not notified of the significance of this NCR by Holtec and at the time of the inspection had not yet performed the proper analysis of the design change as required by the Entergy Quality Assurance Manual. The NCR form used by Holtec did not differentiate between rework and repair. In general, rework is the act of reprocessing non-complying components, through the use of original or equivalent processing, in a manner that assures full compliance of the component with applicable drawings or specifications. In contrast, repair is generally the act of restoring the functional capability of a defective component in a manner that precludes compliance of the component with applicable drawings or specifications. Usually rework does not require customer approval, while most repair work does.

The IPEC Assistant Project Manager stated to the inspector that an Entergy Corrective Action Request (CAR) LO-CAR-2010-00098 was sent to Holtec on December 20, 2010 for their follow up. The follow-up response to the CAR from Holtec had not been received by the licensee prior to the end of this inspection.

c. Conclusions

The inspectors determined that the licensee representatives on site at HMD including the URS Washington Division personnel, and IPEC project management personnel, did not appear to be as familiar as they should have been with how design changes should be handled per the contractural agreement between the licensee and HMD and the Entergy Quality Assurance Manual. As of February 7, 2011, the licensee drafted new language for the contract with Holtec, and Holtec modified the NCR form they use to include a designation for repair. The Entergy Quality Assurance Program Manual requires that supplier evaluations be performed any time prior to placing the component in service. At the conclusion of this inspection, the STC was still being fabricated by Holtec, had not been licensed by the NRC, and had not been shipped to or used by the licensee. A timely review of the design change was not performed by the licensee. However since the STC had not been placed into service, no findings of significance were identified.

2.0 Factory testing and Fit up of STC Components

a. Inspection Scope

The testing and inspection of the various STC components on the HMD factory floor was observed. The inspector also reviewed documentation of factory testing of various components that had occurred prior to the inspection.

b. Observations and Findings

IPEC personnel prepared a spreadsheet that included each component of the STC and what actions where to be performed for that component. Actions included visual inspection for component integrity, testing of the selected component with other components, and functionality of the component. IPEC personnel performed an extensive review of the various components and identified numerous action items for follow up by HMD. In addition load test results of the STC lifting trunnions and the lid lifting devices were reviewed. Open items were noted by the IPEC project managers as well as spare parts to be provided with the STC. Additional visits to Holtec by the licensee will be necessary to resolve the remaining open items.

c. Conclusions

The licensee demonstrated adequate oversight of HMD during the testing and inspection of STC components. A detailed spreadsheet of components, test results, and follow up items was developed. No findings of significance were identified.

Exit Meeting Summary

Within the scope of this inspection, no violations of NRC requirements were identified. The inspector presented the inspection results in a conference call with Joe DeFrancesco, Project Manager for IPEC, and other licensee personnel at the conclusion of this inspection on February 17, 2011.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Glenn Bello, Quality Assurance Auditor, Entergy
*Joe DeFrancesco, Project Manager, Entergy
Suzanne Leblang, Fleet Dry Fuels Coordinator, Entergy
*Rich Miller, Assistant Project Manager, Entergy
*Joseph Pennington, Supervisor Supplier Quality Assurance
Peter Probst, Quality Assurance Auditor, URS Washington Division
Steve Triditi, Mechanic, Entergy
Carl Weber, Mechanic, Entergy

*Denotes attendance at exit telephone call

INSPECTION PROCEDURES USED

60852 ISFSI Component Fabrication by Outside Fabricators

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on the list does not imply the NRC inspector reviewed the documents in their entirety but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document, or any part of it, unless this is stated in the body of the inspection report.

Load Test Procedure for the Shielded Transfer Canister, HPP-1775-8, Rev. 3
Non-Conformance Reports for Shielded Transfer Canister Project
Procurement Specification for Elastomeric Seals for Modified IP-2 HI-TRAC 100D Lid
Entergy CAR LO-CAR-2010-00087, dated 11/04/2010
Entergy CAR LO-CAR-2010-00098, dated 12/10/2011
Entergy Quality Assurance Program Manual, Rev. 21, dated 12/14/2010
Vendor Non-Conformance Report #189, dated 11/11/2010
STC Leak test Procedure, HPP-1775-4, Rev. 0, dated 11/08/2010
Hydrostatic Pressure Test Procedure for STC, HPP-1775-7, Rev. 0, dated 10/29/2010

ACRONYMS

ADAMS	Agency wide Documents Access and Management System
CAR	Corrective Action Request
CFR	Code of Federal Regulations
DNMS	Division of Nuclear Materials Safety
HMD	Holtec Manufacturing Division
IPEC	Indian Point Energy Center
ISFSI	Independent Spent Fuel Storage Installation
NCR	Non-Conformance Report
NRC	Nuclear Regulatory Commission
QA	Quality Assurance
RAI	Request for Additional Information
STC	Shielded Transfer Canister
URS	URS Washington Division